Comparisons of Job Characteristics

Focus Occupation: Conservation Scientists (19-1031)

Associated Occupation: Forest and Conservation Technicians (19-4093)

Compare Knowledge Compare Skills Compare Abilities Compare Detailed Work Activities Compare Tools and Technologies

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

83

Knowledge

Similarity of Focus Occupation to Associated Occupation: 64

Focus Occupation: Conservation Scientists (19-1031)

Associated Occupation: Forest and Conservation Technicians (19-4093)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Geography	3.9	13.3	14.3	0	Current knowledge level may be sufficient
Transportation	4.6	11.5	3.3	<<	Extensive education and/or training may be required
Biology	3.7	9.4	16.2	>>	Current knowledge level is likely more than sufficient
History and Archeology	2.6	8.4	9.0	0	Current knowledge level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation:

Focus Occupation: Conservation Scientists (19-1031)

Associated Occupation: Forest and Conservation Technicians (19-4093)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Management of Personnel Resources	6.9	9.1	8.6	Current skill level may be sufficient	
Mathematics	6.2	9.1	7.4	A higher skill level may be required	
Equipment Selection	3.3	5.3	2.0	Extensive development of skills in this area may be required	
Programming	2.2	4.6	3.0	Extensive development of skills in this area may be required	

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Focus Occupation: Conservation Scientists (19-1031)

Associated Occupation: Forest and Conservation Technicians (19-4093)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Far Vision	7.8	11.9	10.5	Some improvement in abilities may be required	
Depth Perception	5.3	9.2	7.2	Some improvement in abilities may be required	
Stamina	4.0	8.0	4.4	Extensive improvement in abilities may be required	
Spatial Orientation	2.7	7.4	5.0	Extensive improvement in abilities may be required	
Speed of Limb Movement	3.2	7.0	3.5	Extensive improvement in abilities may be required	
Glare Sensitivity	2.6	6.9	3.6	Extensive improvement in abilities may be required	
Dynamic Strength	3.5	6.5	4.4	Extensive improvement in abilities may be required	
Gross Body Equilibrium	3.2	6.4	3.2	Extensive improvement in abilities may be required	

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O^*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 90

Focus Occupation: Conservation Scientists (19-1031)

Associated Occupation: Forest and Conservation Technicians (19-4093)

Work Activities	Exclusivity of Activity
Adhere to safety procedures	12
Advise clients or customers	19
Analyze biological research, test, or analysis data	70
Analyze scientific research data or investigative findings	27
Classify plants, animals, or other natural phenomena	69
Collect scientific or technical data	30
Collect statistical data	47
Communicate technical information	4
Conduct field research or investigative studies	52
Conduct land surveys	81
Conduct training for personnel	30
Develop or maintain databases	30
Develop tables depicting data	33
Direct and coordinate activities of workers or staff	3
Ensure compliance with government regulations	76

Explain complex mathematical information	30	
Explain government laws or regulations		
Interpret aerial photographs	69	
Judge soil conditions	77	
Maintain records, reports, or files	5	
Make presentations	13	
Obtain land survey data using surveying instruments	87	
Operate emergency fire or rescue equipment	80	
Operate forestry equipment	92	
Operate land or site surveying instruments	80	
Perform statistical analysis	71	
Plan forestation, reforestation, or range revegetation projects	95	
Prepare reports	8	
Read maps	42	
Read measuring or metering devices used in forestry	89	
Read surveying instruments to measure property	99	
Recognize plant diseases	72	
Recognize tree or forest plant species	78	
Recognize wood species characteristics	78	
Record test results, test procedures, or inspection data	48	
Use biological research techniques	68	
Use building or land use regulations	65	
Use computers to enter, access or retrieve data	3	
Use fire suppression techniques	89	
Use forest fire protection methods	89	
Use forestry, range, or other public land management techniques	92	
Use government regulations	44	
Use herbicides, fertilizers, pesticides or related products	71	
Use interpersonal communication techniques	10	
Use knowledge of environmental laws and regulations	76	
Use knowledge of investigation techniques	16	
Use knowledge of regulations in surveying or construction activities	78	
Use land surveying techniques	80	
Use long term forest or range land planning techniques	95	
Use mathematical or statistical methods to identify or analyze problems	30	
Use oral or written communication techniques	1	
Use pollution control techniques	62	
Use public speaking techniques	13	
Use quantitative research methods	35	
Use relational database software	26	
Use scientific research methodology	21	
Use spreadsheet software	18	
Use word processing or desktop publishing software	17	
Work as a team member	36	

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 93

Focus Occupation: Conservation Scientists (19-1031)
Associated Occupation: Forest and Conservation Technicians (19-4093)

Tools and Technologies	Exclusivity
Audio and visual equipment	4
Cameras	2
Computers	1
Content authoring and editing software	1
Data management and query software	1
Industry specific software	1
Information exchange software	1
Land surveying instruments	19
Length and thickness and distance measuring instruments	2
Network applications software	1
Sampling equipment	12
Soil measuring equipment	20

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O^*NET (Occupation Information Network) data.